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## What is claimed is:

A process for applying at least two chemically different flowable media, particularly aqueous solutions of polymers, dispersions or combinations thereof as adhesives and coating materials, or coatings, comprising the following steps:

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- a) applying at least two chemically different flowable media to web-form substrates continuously in one operation using a multiple cascade die (1),
- b) the total amount of the multilayer application is between 2 g/m² to 200 g/m² and
- c) the ratio of the individual layers within the multilayer application to one another is between 0.1 to 100.
- 2. A process as claimed in claim 1, used to laminate composite films and high-gloss films or to render web-form substrates, particularly paper or film, adhesive.
- 20 3. A process as claimed in claim 1, used to coat web-form substrates such as paper, polymeric films or metallized surfaces, the layer facing the surface acting to improve the adhesion or as a barrier coat.
- 4. A process as claimed in claim 1, used to paint substrates to jointly apply thereto elastic and hard layers in one pass.
  - 5. A process as claimed in claim 1, wherein two layers of cationic and anionic polymers are applied which on layering tend toward gelling or coagulation.
- 30 6. A process as claimed in claim 5, wherein the two layers are a combination of cationic polymer solutions with anionic dispersions.
  - 7. A process as claimed in claim 1, using solutions of polyvalent metal salts or metal complexes with polymer dispersions.
  - 8. A process as claimed in claim 1, wherein in one of the chemically different layers polyisocyanate, polyepoxides or polyacyridines are combined with another layer which comprises dispersions.
- 40 9. A process as claimed in claim 8, in relation to solutions of reactive products used as crosslinkers.

- 10. A process as claimed in claim 1, wherein chemically different dispersions are applied as individual layers in one operation such as styrene-butadiene dispersions, acrylate, ethylene, vinylacetate dispersions and polyurethane dispersions, wax emulsions or silicone emulsions as release coat (antistick layer).
- 11. A process as claimed in claim 10, wherein a first thin layer serves to improve wettability on the release coat.

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